

Work Order ID 86861

86861

Page 1

July-06-12 3:16:42 PM

Item ID: D3319-3

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Wearplate

Start Date: 7/06/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 8/10/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan:

Date: 12-07-10

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3319	C

100

0.00

100

Waterjet

FLOW WATER JET

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3319

10/0 .050

Dwg Rev: C

Prog Rev: C

2-Deburr if necessary

10 0 Jan 12-7-18

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

10 0 Jan 12-7-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86861

86861

Page 2

July-06-12 3:16:42 PM

Item ID: D3319-3 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Wearplate
Start Date: 7/06/12 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 8/10/12 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 <i>SmB</i> 0.00 <i>12-7-18</i>	<i>DAS 16 9-83</i> <i>12/27/18</i>			<i>10</i>	<i>0</i>		<i>SmB 12-7-18</i>
140 *140* Brake NC Brake NC	NC BRAKE Memo Form using DT8326 & DT8261 as per Dwg D3319Rev: <i>C</i>	0.00 0.00				<i>10</i>			<i>St 12/27/18</i>
150 *150* QC Quality Control	QC6- Inspect dimensions to drawing Memo	0.00 0.00	<i>DAS 16 9-83</i> <i>12/27/18</i>			<i>60</i>			

W/O:		WORK ORDER CHANGES					
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Item ID: D3319-3

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Wearplate

Start Date: 7/06/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 8/10/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

Weld per dwg A/R Hardcoat steel Batch: M/22359***160***

Large Fab

Large Fab

Memo

0.00

(x10)me12-08-08

Weld hard surface using D3319-3T2 per QSI 004 and Dwg D3319

Batch A/R 7560 Hardcoat Rod

M/22359 -> 228

170

QC10- Inspect visual per QSI004- ground welds

0.00

170

QC

Memo

0.00

1012.8.9DAS
24
8-09

Quality Control

180

QC5- Inspect part completeness to step on W/O

0.00

180

QC

Memo

0.00

1012.8.9DAS
24
8-09

Quality Control

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Item Name: Wearplate

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10

Cust Item ID:

Required Date: 8/10/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
190									
Powdercoat									
Powder Coating									
	Memo								
	START TIME: 1:50	0.00							
	OVEN TEMPERATURE: 320 °C								
	FINISH TIME: 2:20								
200	QC3- Inspect Part Finish	0.00							
200									
QC									
Quality Control	Memo								
210	Packaging	0.00							
210									
Packaging									
Packaging									
	Memo								
	Identify on inside surface using a permanent fine point marker with the following: TCCA-PDA, Dart Aerospace Ltd. P/N: D3319-3, B/N: BXXXXX For Product Eligibility see PDA05-18 and Stock								
	Location: 500								

10XØ

ML 12/08/13

10x d 12/08/13

8 12/08/14

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220

QC21- Final Inspection - Work Order Release

0.00

220

QC

Memo

0.00

Quality Control

MLJ 12/08/12

12-08-12

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Picklist Print

July-06-12 3:16:41 PM

Page 1

Work Order ID: 86861

Parent Item: D3319-3

Parent Item Name: Wearplate

Start Date: 7/06/12

Required Date: 8/10/12

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP: A05.05.12New issueKJ/JLM
IPP Rev:B Now on Waterjet 06-10-03 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M1010S18GA 1010/1025 SHEET .048		Purchased	No			100	sf	64.4855	3.2524	34.235789 35			Jm 12-7-12
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT019		64.485474							
				116268		0.485474							
				122311		64				122311			

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	80861
Description: Wearplate		Part Number:	D3319-3
Inspection Dwg: D3319 Rev: C		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.190	+0.005/-0.001	0.190"	✓		U	mmol
Ø0.500	+0.006/-0.001	0.500"	✓		U	"
0.316	+/-0.010	0.314"	✓		U	"
0.607	+/-0.010	0.609"	✓		U	"
2.94	+/-0.030	2.937"	✓		U	"
2.69	+/-0.030	2.701"	✓		U	"
3.527	+/-0.010	3.529"	✓		U	"
4.52	+/-0.030	4.515"	✓		U	"
5.063	+/-0.010	5.066"	✓		U	"
6.16	+/-0.030	6.166"	✓		U	"
0.60	+/-0.030	0.607"	✓		U	"
8.690	+/-0.010	8.697"	✓		U	"
30.790	+/-0.010	30.790"	✓		MT	mmol
52.88	+/-0.030	52.88"	✓		MT	"
62.770	+/-0.010	62.770"	✓		MT	"
74.420	+/-0.010	74.420"	✓		MT	"
75.52	+/-0.030	75.52"	✓		MT	"
0.050	+/-0.010	0.048"	✓		U	mmol

Measured by: Jm	Audited by: SMB	Preliminary Approval:
Date: 12-7-18	Date: 12-7-18	Date:

Rev	Date	Change	Revised by	Approved
A	07.07.18	New Issue	KJ/JLM	
B	12.05.15	Dimensions updated per Dwg Rev C	KJ	

Dart Aerospace Ltd

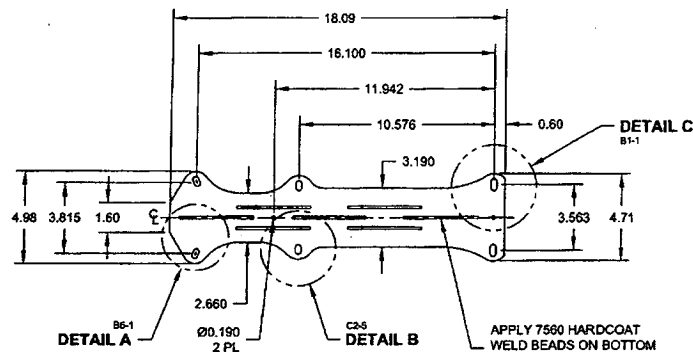
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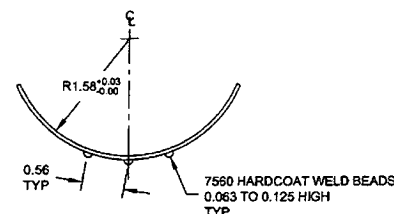
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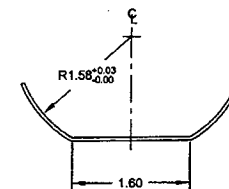
NOTE: Date & initial all entries



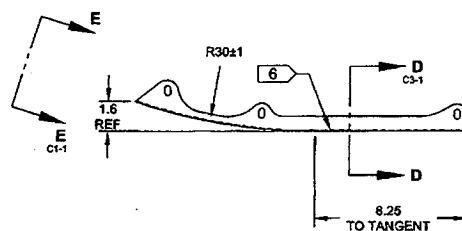
D3319-1F FLAT PATTERN



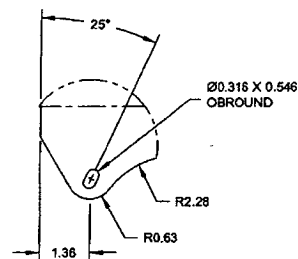
SECTION D-D
SCALE 4X B6-1



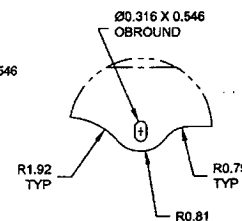
SECTION E-E
SCALE 4X B6-1



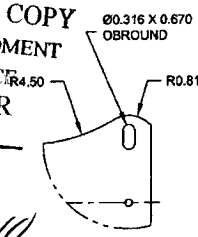
D3319-1 BENDING DETAIL
MAKE FROM D3319-1F



DETAIL A
SCALE 4X C8-1



DETAIL B
SCALE 4X C8-1



DETAIL C
SCALE 4X C8-1

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *10207-10*

D3319-1 WEARPLATE

NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
REF. DART SPEC. M1010-S18GA
- 2) FINISH: POWDER COAT GREY SANDEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY ON INSIDE SURFACE WITH "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18" PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: 0.90 lbs APPROX
- 8) SYMMETRY: ABOUT CENTERLINE

RELEASED
2012-03-16
PER ECW 12-946 12.03.16

C	UPDATE TO CURRENT STANDARDS IAW QSI 043; CLOSED AFT. MOST HOLE ON -3/-5/-7 (REF DETAIL G). SEE NCR12-547.	MB	12.03.13
B	WIDEN HOLES, REDUCE WIDTH ON -3/-5/-7	PH	05.06.06
A	NEW ISSUE	PH	04.09.24
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.		TITLE WEARPLATE	
DATE	12.03.13	REV. C SHEET 1 OF 4 SCALE NTS	

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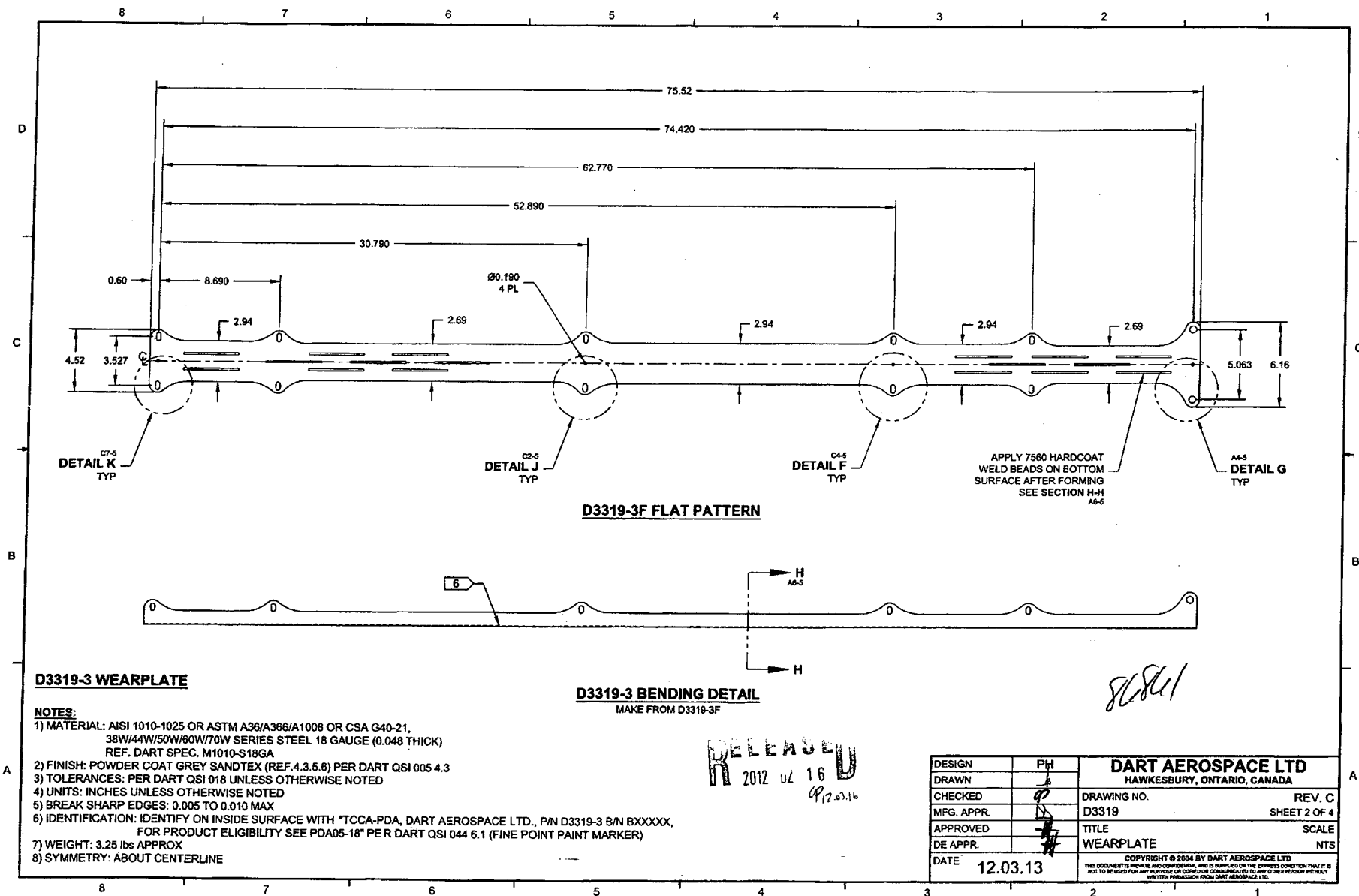
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Dart Aerospace Ltd

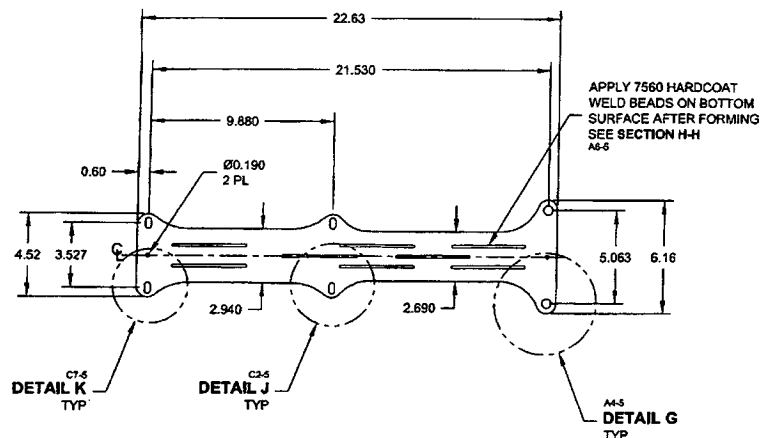
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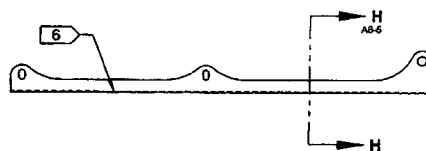
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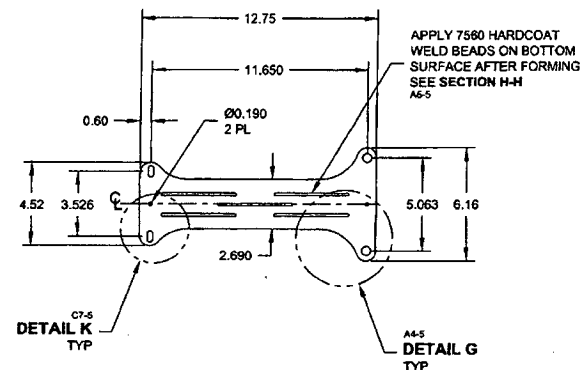
NOTE: Date & initial all entries



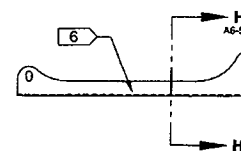
D3319-5F FLAT PATTERN



D3319-5 BENDING DETAIL
MAKE FROM D3319-5F



D3319-7F FLAT PATTERN



D3319-7 BENDING DETAIL
MAKE FROM D3319-7F

D3319-5/-7 WEARPLATE

NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK) REF. DART SPEC. M1010-S18GA
- 2) FINISH: POWDER COAT GREY SANTEX (REF.4.3.5.8) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY ON INSIDE SURFACE WITH "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-X B/N BXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18" PER DART QSI 046 6.1 (PERMANENT MARKER)
- 7) WEIGHT: D3319-5 = 1.05 lbs APPROX; D3319-7 = 0.60 lbs APPROX
- 8) SYMMETRY: ABOUT CENTERLINE

RELEASED
2012-02-16
912.5316

DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. C
CHECKED		D3319	SHEET 3 OF 4
MFG. APPR.		TITLE	SCALE
APPROVED		WEARPLATE	NTS
DE APPR.		COPYRIGHT © 2004 BY DART AEROSPACE LTD	
DATE	12.03.13	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

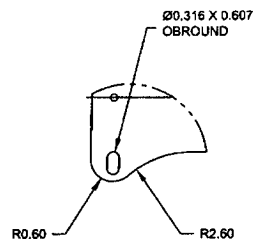
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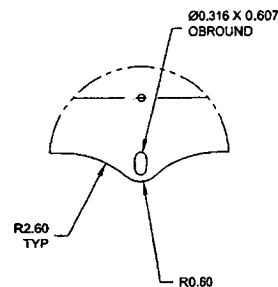
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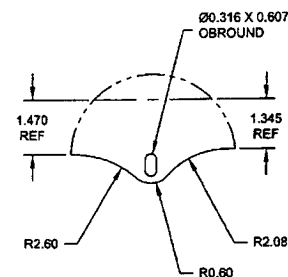
NOTE: Date & initial all entries



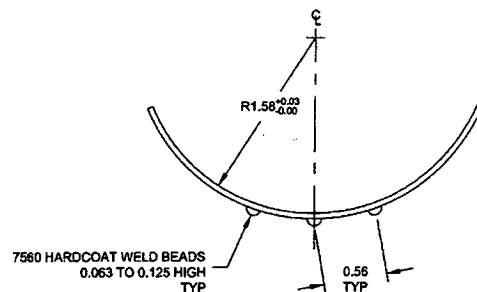
DETAIL K
SCALE 2X
B6-2
C4-3
C8-3



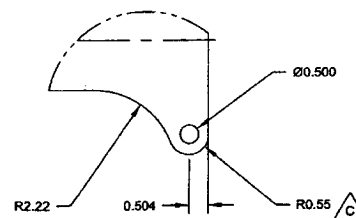
DETAIL F
SCALE 2X
B3-2



DETAIL J
SCALE 2X
B6-2
C7-3



SECTION H-H
SCALE 4X
B4-2
B3-3
B6-3



DETAIL G
SCALE 2X
B6-2
C2-3
C6-3

86.861

RELEASED
2012-02-16
UP, 2.3.16

DESIGN	PH	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3319	REV. C SHEET 4 OF 4
MFG. APPR.		TITLE	SCALE
APPROVED		WEARPLATE	NTS
DE APPR.		COPYRIGHT © 2004 BY DART AEROSPACE LTD	
DATE	12.03.13	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR CORRECT OR OTHERWISE TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries